

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-11. (cancelled)

12. (amended) A method of producing monoclonal antibodies ~~with conformational specificity for a host chaperone protein that is involved in assembly of immature HIV capsids and not to conformers of said host chaperone protein that do not bind to Gag and do not facilitate HIV capsid assembly~~, said method comprising the steps of:

~~immunizing knockout mice with said host chaperone protein, wherein said knockout mice have a non-functional gene that no longer codes for said host chaperone protein and lack the ability to produce said host chaperone protein;~~

producing hybridoma cells from antibody producing cells of [said] mice obtained according to the method of Claim 54, wherein said cells produce antibodies that have conformational specificity for a chaperone protein that is involved in assembly of immature HIV capsids and not to conformers of said host chaperone protein that do not bind to Gag and do not facilitate HIV capsid assembly;

screening said hybridoma cells for production of said antibodies to said host chaperone protein; and

propagating hybridoma cells producing antibodies with conformational specificity for said host chaperone protein, whereby antibodies to said host chaperone protein are produced.

13. (original) Monoclonal antibodies produced according to the method of Claim 12.

14. (original) Binding fragments to said conformer derived from monoclonal antibodies produced according to the method of Claim 12.

15-50. (cancelled)

51. (previously presented) The method according to Claim 12, wherein said host chaperone protein is HP68 and said conformer is an RNase L inhibitor.

52. (previously presented) The method according to Claim 12, wherein said host chaperone protein is obtained by separating a capsid intermediate complex into components comprising said host chaperone protein and an HIV capsid protein.

53. (previously presented) The method according to Claim 52, wherein said capsid intermediate complex is selected from the group consisting of proteins having a buoyant density of about 10S, about 80S, about 150S and about 500S.

54. (new) A method for obtaining a transgenic mouse that produces antibodies to a chaperone protein, said method comprising:

introducing a transgene comprising a nucleic acid encoding said chaperone protein into a mouse embryonic stem cell;

introducing the mouse embryonic stem cell into a mouse embryo;

transplanting the embryo into a pseudopregnant mouse;

allowing the embryo to develop to term;

identifying a transgenic mouse homozygous for a disruption of the endogenous gene of the mouse counterpart of said chaperone protein in its genome so that it does not produce said mouse counterpart of said chaperone protein; and

immunizing said transgenic mouse with said chaperone protein, whereby a mouse that produces antibodies to said chaperone protein that is involved in assembly of immature HIV

PATENT**ATTORNEY DOCKET NO. UCSF.002.01US**

capsids and not to conformers of said host chaperone protein that do not bind to Gag and do not facilitate HIV capsid assembly is obtained.